

an inner ring and an outer ring and a plurality of balls interposed therebetween, said bearing device further including:

5 a low expansion member press fit around an outer periphery of the outer ring, wherein the low expansion member is made of a material having a coefficient of linear expansion which is lower than the coefficient of linear expansion of the outer ring.

2 (Amended). A motor having a rotational member rotatably supported through a bearing device provided on a base member thereof, said bearing device including:

a shaft,

a cylindrical outer ring member surrounding the shaft,

5 a plurality of balls arranged in first and second rows interposed between the shaft and the outer ring member, and

a low expansion member press fit around an outer periphery of the outer ring member, wherein the low expansion member is made of a material having a coefficient of linear expansion which is lower than the coefficient of linear expansion of the outer 10 ring member.

3 (Amended). A motor having a rotational member rotatably supported through a bearing device provided on a base member thereof, said bearing device including;

a shaft to which an inner ring is fit slidably therearound,

a cylindrical outer ring member surrounding the shaft,

5 a plurality of balls of a first row interposed between a first inner ring raceway formed on an outer periphery of the inner ring and a first outer ring raceway formed on an inner periphery of the outer ring member,

Said B. C. made. A. C. 15

a plurality of balls of a second row interposed between a second inner ring raceway formed directly on an outer periphery of the shaft and a second outer ring raceway formed on an inner periphery of the outer ring member, and

10 a low expansion ring press fit around an outer periphery of the outer ring member, wherein the low expansion ring is made of a material having a coefficient of linear expansion which is lower than the coefficient of linear expansion of the outer ring member, and

15 the inner ring is secured on the shaft with applying an appropriate amount of preload thereon.

4 (Amended). A motor having a rotational member rotatably supported through a bearing device provided on a base member thereof, said bearing device including:

a shaft,

a cylindrical outer ring member surrounding the shaft,

5 a plurality of balls of first and second rows interposed between the shaft and the outer ring member, and

a low expansion member press fit around an outer periphery of the outer ring member,

wherein the low expansion member is made of a material having a coefficient of
10 linear expansion which is lower than the coefficient of linear expansion of the outer ring
member, and

wherein the shaft is secured on the base member to extend therefrom, and a
central portion of the rotational member is fit over the outer periphery of the outer ring
member.

Adapt
Sub B
5
Amended 2/20/02
5 (Amended). A motor having a rotational member rotatably supported through a
bearing device provided on a base member thereof, said bearing device including:

a shaft to which an inner ring is fit slidably therearound,
a cylindrical outer ring member surrounding the shaft,
a plurality of balls of a first row interposed between a first inner ring raceway
formed on an outer periphery of the inner ring and a first outer ring raceway formed on
an inner periphery of the outer ring member,

a plurality of balls of a second row interposed between a second inner ring
raceway formed directly on an outer periphery of the shaft and a second outer ring
raceway formed on an inner periphery of the outer ring member, and

10 a low expansion ring press fit around an outer periphery of the outer ring member,
wherein the low expansion ring is made of a material having a coefficient of
linear expansion which is lower than the coefficient of linear expansion of the outer ring
member,

15. the inner ring is secured on the shaft with applying an appropriate amount of
preload thereon, and

*Sub B2
canc'd.* wherein the shaft is secured on the base member to extend therefrom, and a
central portion of the rotational member is fit over the outer periphery of the outer ring
member.

Ahur
6 (Amended). The bearing device according to claim 1, characterized in that the
balls are of ceramic material.

7 (Amended). The bearing device according to claim 1, characterized in that the
low expansion member is of ceramic material.

8 (New). The bearing device according to claim 2, characterized in that the balls are
of ceramic material.

A2
9 (New). The bearing device according to claim 2, characterized in that the low
expansion member is of ceramic material.

10 (New). The bearing device according to claim 3, characterized in that the balls are
of ceramic material.

11 (New). The bearing device according to claim 3, characterized in that the low expansion ring is of ceramic material.

12 (New). The bearing device according to claim 4, characterized in that the balls are of ceramic material.

13 (New). The bearing device according to claim 4, characterized in that the low expansion member is of ceramic material.

14 (New). The bearing device according to claim 5, characterized in that the balls are of ceramic material.

15 (New). The bearing device according to claim 5, characterized in that the low expansion ring is of ceramic material.

Marked Up Copy of Rewritten Pages 32-35 Including Amended Claims 1-7

What is claimed is[,]:

1 (Amended). A motor having a rotational member rotatably supported through a bearing device provided on a base member of the motor, said bearing device including an inner ring and an outer [rings] ring and a plurality of balls interposed therebetween, said bearing device further including[;]:

5 a low expansion member press fit around [the] an outer periphery of the outer ring, wherein the low expansion member is made of a material [lower in its] having a coefficient of linear expansion which is lower than [that employed for] the coefficient of linear expansion of the outer ring.

2 (Amended). A motor having a rotational member rotatably supported through a bearing device provided on a base member thereof, said bearing device [further] including[;]:

a shaft,

5 a cylindrical outer ring member surrounding the shaft,

a plurality of balls [of the] arranged in first and [the] second rows interposed between the shaft and the outer ring member, and

a low expansion member press fit around [the] an outer periphery of the outer ring member, wherein the low expansion member is made of a material [lower in its] having a

10 coefficient of linear expansion which is lower than [that employed for] the coefficient of
linear expansion of the outer ring member.

3 (Amended). A motor having a rotational member rotatably supported through a bearing device provided on a base member thereof, said bearing device [further] including;

a shaft to which an inner ring is fit slidably therearound,
a cylindrical outer ring member surrounding the shaft,
a plurality of balls of [the] a first row interposed between [the] a first inner ring raceway formed on [the] an outer periphery of the inner ring and [the] a first outer ring raceway formed on [the] an inner periphery of the outer ring member,
a plurality of balls of [the] a second row interposed between [the] a second inner ring raceway formed directly on [the] an outer periphery of the shaft and [the] a second outer ring raceway formed on [the] an inner periphery of the outer ring member, and
a low expansion ring press fit around [the] an outer periphery of the outer ring member,

wherein the low expansion ring is made of a material [lower in its] having a coefficient of linear expansion which is lower than [that employed for] the coefficient of
linear expansion of the outer ring member, and

the inner ring is secured on the shaft with applying an appropriate amount of preload thereon.

4 (Amended). A motor having a rotational member rotatably supported through a bearing device provided on a base member thereof, said bearing device [further] including[;]:

a shaft,

5 a cylindrical outer ring member surrounding the shaft,

a plurality of balls of [the] first and [the] second rows interposed between the shaft and the outer ring member, and

a low expansion member press fit around [the] an outer periphery of the outer ring member,

wherein the low expansion member is made of a material [lower in its] having a coefficient of linear expansion which is lower than [that employed for] the coefficient of linear expansion of the outer ring member, and

15 wherein the shaft is secured on the base member to extend therefrom, and [the] a central portion of the [rotor or the] rotational member is fit over the outer periphery of the outer ring member.

5 (Amended). A motor having a rotational member rotatably supported through a bearing device provided on a base member thereof, said bearing device [further] including[;]:

a shaft to which an inner ring is fit slidably therearound,

5 a cylindrical outer ring member surrounding the shaft,
a plurality of balls of [the] a first row interposed between [the] a first inner ring
raceway formed on [the] an outer periphery of the inner ring and [the] a first outer ring
raceway formed on [the] an inner periphery of the outer ring member,
a plurality of balls of [the] a second row interposed between [the] a second inner
10 ring raceway formed directly on [the] an outer periphery of the shaft and [the] a second
outer ring raceway formed on [the] an inner periphery of the outer ring member, and
a low expansion ring press fit around [the] an outer periphery of the outer ring
member,

wherein the low expansion ring is made of a material [lower in its] having a
coefficient of linear expansion which is lower than [that employed for] the coefficient of
linear expansion of the outer ring member,

the inner ring is secured on the shaft with applying an appropriate amount of
preload thereon, and

wherein the shaft is secured on the base member to extend therefrom, and [the] a
20 central portion of the [rotor or the] rotational member is fit over the outer periphery of
the outer ring member.

6 (Amended). The bearing device according to [any one of claims 1-5] claim 1,
characterized in that the balls are of ceramic material.

7 (Amended). The bearing device according to [any one of claims 1-5] claim 1, characterized in that the low expansion member is of ceramic material.